U. S. DEPARTMENT OF COMMERCE HARRY L. HOPKINS, Secretary

NATIONAL BUREAU OF STANDARDS LYMAN J. BRIGGS, Director

BOOK CLOTHS, BUCKRAMS, AND IMPREGNATED FABRICS

FOR BOOKBINDING PURPOSES EXCEPT LIBRARY BINDINGS

(SECOND EDITION)

COMMERCIAL STANDARD CS57-40

(SUPERSEDES CS57-36)

Effective from June 20, 1940



A RECORDED VOLUNTARY STANDARD OF THE TRADE

Approved by the American Standards Association as American Standard CS57-40

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1940

PROMULGATION

of

COMMERCIAL STANDARD CS57-40

for

BOOK CLOTHS, BUCKRAMS, AND IMPREGNATED FABRICS

FOR BOOKBINDING PURPOSES EXCEPT LIBRARY BINDINGS

(Second Edition)

On December 5, 1935, at the request of the Employing Bookbinders of America, the Book Manufacturers' Institute, and with the approval of the Institute of Book Cloth and Impregnated Fabrics Manufacturers, a proposed commercial standard for book cloths, buckrams, and impregnated fabrics (for bookbinding purposes, except library bindings) was submitted to manufacturers, publishers, distributors, bookbinders, and users for approval of all concerned. This proposed standard was subsequently accepted by the industry and promulgated as Commercial Standard CS57-36.

On March 28, 1940, on recommendation of the standing committee, a revision of CS57-36, submitted by the Institute of Book Cloth and Impregnated Fabrics Manufacturers, was circulated for acceptance. The industry has since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective from June 20, 1940.

Promulgation recommended.

I. J. Fairchild, Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Harry L. Hopkins, Secretary of Commerce.

BOOK CLOTHS, BUCKRAMS, AND IMPREGNATED FABRICS

FOR BOOKBINDING PURPOSES EXCEPT LIBRARY BINDINGS

(Second Edition)

COMMERCIAL STANDARD CS57-40

SCOPE

1. The standards of quality and the test procedure herein described are intended to apply to book cloths and buckrams which are starch filled, and to the so-called impregnated fabrics used in the bookbinding industry for edition, textbook, trade, catalogue, and all other than library bindings.

GENERAL REQUIREMENTS

2. The finished fabric shall be free from pinholes and blemishes which may affect the appearance or serviceability of the material. It must be suitable for use on automatic-feeding devices on case-making machines.

3. The base fabric shall be made of cotton thoroughly cleansed and free from waste. It shall be evenly woven and free from an excessive

number of imperfections of manufacture.

4. The weave shall be plain, except that the warp yarns of the medium and heavy weight buckrams, both the starch filled and the impregnated, shall be woven in pairs.

DEFINITIONS

5. Finished weight.—The manufacturers of the materials conforming to these specifications may vary the finished weight of their fabrics, for the purpose of producing suitable finishes, provided the requirement covering freedom from pinholes is complied with. No limitation is placed on the weight of the finished fabric unless the purchaser specifically designates a limit in the purchase order.

6. Stripped cloth weight.—The basis of weight comparison shall be the weight of the fabric which remains after the finished fabric has been stripped of all starch and loading, or impregnating material. The weight of the stripped fabric shall be designated the "stripped-cloth weight", and it shall be expressed in ounces per square yard.

7. Thread count.—The thread count shall be expressed as the number of threads in a square inch, the sum of the warp and filling threads,

unless the purchaser shall specifically designate otherwise.

8. Breaking strength sum.—For the purposes of this standard the breaking strength sum shall be the sum of the warp and filling averages expressed in terms of pounds per inch strip of the finished fabric.

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GROUPS

9. For the purpose of classifying the bookbinding fabrics covered by these specifications, the following general divisions are established:

Book cloths (starch filled and impregnated)		Buckrams (starch filled and impregnated)	
Group	Weight	Group	Weight
AB	Light. Medium. Heavy. Heavy.	D	Light. Medium. Heavy.

SPECIFIC REQUIREMENTS

10. The bookbinding fabrics covered by groups A, B, C, C-1, D, E, and F, shall equal or exceed the minimum requirements given in table 1 for their respective groups:

Table 1.—Minimum requirements

Group	Stripped- cloth weight not less than—	Warp plus filling threads per inch not less than—	Breaking- strength sum 1 (sum of warp and filling) not less than—	Breaking-strength 1 not less than—	
				Warp	Filling
A	oz per sq yd 1. 7 2. 1 3. 4 4. 2 4. 7 6. 0 7. 9	92 104 104 94 58 106 110	2b 60 77 105 120 110 165 200	lb 38 50 55 64 65 100 120	1b 15 20 42 48 35 55 70

^{1 25} percent less for embossed cloths.

TOLERANCES

11. The breaking-strength values listed under "Specific Requirements" apply only to bookbinding fabrics with a plain finish. A variation of not over 25 percent below the minimum breaking-strength values established for plain-finished cloths is allowed on embossed cloths, provided all other requirements are met.

TEST CONDITIONS

12. The following test conditions shall be used to determine the adherence of starch-filled and impregnated bookbinding fabrics to the requirements of their respective groups as designated under "Specific Requirements."

13. For the usual routine testing in plants not equipped with humidity and temperature controls, the prevailing atmospheric conditions are satisfactory. However, should a sample tested under prevailing atmospheric conditions fail to meet any of the specific

requirements of its group, or in the settlement of disputes, the material must be tested under standard conditions. The standard condition for starch-filled and impregnated bookbinding fabrics shall be understood to be the condition which those fabrics assume after exposure for at least 4 hours to an atmosphere having a relative humidity of 65 ± 2 percent at 70 ± 2 °F.

SAMPLING FOR TEST

14. For routine testing a sample approximately 1½ yards long shall be taken across the full width of the roll. The sample may be taken from any roll in the shipment. Should the sample, when tested under prevailing atmospheric conditions, fail to meet the specific requirements of the group to which it belongs, it shall then be tested under standard conditions. In case the sample tested under standard conditions fails to meet the specific requirements of its group, a duplicate sample shall be taken as follows:

Rolls in shipment	Rolls to be sampled	
1 to 3 4 to 10 11 to 20 21 or more	Each roll. 3. 4. 20% of shipment.	

The duplicate sample shall be tested under standard conditions. The results of the tests on the individual rolls in the duplicate sample shall be averaged, and the average shall be considered the actual test of the shipment.

WIDTH

15. No standard widths are designated in these specifications. However, to determine conformance with individual purchase requirements, the purchaser, if he so desires, may measure the width of bookbinding fabrics by the following procedure: The test specimen is laid without tension on a flat surface and the distance from edge to edge perpendicular to the selvage is measured to an accuracy of one-eighth of an inch. The average of three measurements is considered the width.

METHODS OF TEST

16. Weight.—An accurately measured specimen, at least 100 square inches in area and thoroughly representative of the test sample, shall be stripped of all starch and loading, and/or impregnating material, by any method or methods suitable for removing starches and impregnating materials. The stripped fabric shall be dried thoroughly at 105° C and then conditioned, by exposure to the air, for at least 4 hours. The conditioning should be carried out under standard conditions whenever possible. The conditioned specimen shall then be accurately weighed. From this stripped weight and from the area of the unstripped specimen, the stripped cloth weight per square yard may be calculated.

17. Thread count.—The actual number of threads per linear inch shall be counted in each direction in the finished cloth. At least three counts in each direction shall be made and the results in each direction averaged. The thread count shall be expressed as the sum of the average counts of the warp and filling threads. No warp count shall be taken nearer the selvage than one-tenth the width of the fabric. The scale of the pick counter shall be set perpendicular to the general direction of the threads to be counted.

18. Breaking strength.—The breaking strength shall be determined in accordance with the following general procedure: A swatch of the finished material 7 inches wide shall be cut the entire width of the test sample and 12 specimens shall be cut from this swatch, 6 with the long dimension in the direction of the warp and 6 in the direction of the filling. The specimens shall be fairly representative of the material and should be cut in accordance with the scheme shown in figure 1, avoiding the area within 2 inches of either selvage. The

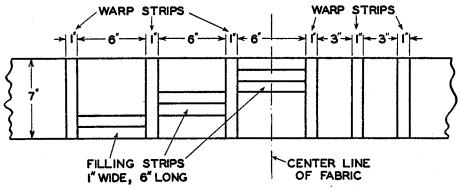


FIGURE 1.—Diagram for cutting test specimens.

following requirements shall be adhered to: A. The test specimens shall be accurately cut to a width of 1 inch and a minimum length of 6 inches. No two specimens shall contain the same set of threads. Five specimens in each direction of the cloth shall be tested and the average breaking strength in each direction determined. B. The breaking-strength sum shall be the combined warp and filling breaking-strength averages, expressed in pounds per inch strip, of the finished fabric. The breaking-strength sum for any fabric shall not be less than the minimum requirement for its group, and the warp and filling averages must equal or exceed the minimum figures given for the same group under "Specific requirements." C. The machine used for making the breaking-strength determinations shall be of the pendulum type, type A, described in Standard Specifications for Textile Testing Machines, ASTM designation D 76-39, sections 2, 3, and 5. The clamps used on the testing machine shall have faces measuring 1 by 11/2 inches, or more, the longer dimension being perpendicular to the direction of the application of the load. The initial distance between the clamps shall be 3 inches, and the speed of the pulling clamp shall be $12 \pm \frac{1}{2}$ inches per minute.

AMERICAN STANDARD

This commercial standard was approved as American Standard CS57-40 by the American Standards Association on August 7, 1940.

CLAIMS

All claims arising from nonconformity with these specifications must be made before goods are cut, except the cutting necessary for sampling and test purposes.

LABEL

The manufacturers of starch-filled and impregnated bookbinding fabrics shall place the following label on each roll of their fabric to indicate that the material is guaranteed to meet the foregoing specifications:

These goods are manufactured to conform with Commercial Standard CS57-40 as issued by the United States Department of Commerce and approved by the American Standards Association.

EFFECTIVE DATE

The standard is effective from June 20, 1940.

STANDING COMMITTEE

The following individuals comprise the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Each association nominated its own representatives. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Division of Trade Standards. National Bureau of Standards, which acts as secretary for the Committee.

- Institute of Book Cloth and Impregnated Fabrics Manufacturers:
 C. V. Austin (chairman), The Holliston Mills, Inc., Norwood, Mass.
 O. Angier, The Columbia Mills, Inc., 225 Fifth Avenue, New York, N. Y.
 J. Frank Morrissey, Interlaken Mills, Fiskeville, R. I.
 E. A. Clare, Athol Manufacturing Co., Athol, Mass.
 Book Manufacturers' Institute and Employing Bookbinders of America:
 E. W. Palmer, Kingsport Press, Kingsport, Tenn.
 J. Charles Ziegler, Franklin Bindery, 1366 Cherry Street, Philadelphia, Pa.
 F. B. Blaylock, Employing Bookbinders of America. United States Govern-
 - F. R. Blaylock, Employing Bookbinders of America, United States Government Printing Office, Washington, D. C.
- National Association of Book Publishers: John Benbow, Longmans, Green & Co., 55 Fifth Avenue, New York, N. Y.
- American Library Association: John Archer, The New York Public Library, New York, N. Y.

HISTORY OF PROJECT

On October 23, 1935, following a research study by F. R. Blaylock, Research Associate at the United States Government Printing Office for the Employing Bookbinders of America and the Book Manufacturers' Institute, these two organizations, with the approval of the Institute of Book Cloth and Impregnated Fabrics Manufacturers, submitted a proposed commercial standard for book cloths, buckrams, and impregnated fabrics with a request for the cooperation of the National Bureau of Standards toward the development of a commercial standard.

Agreeable to that request, the proposed commercial standard was circulated on December 5, 1935, to book cloth manufacturers, publishers, binderies, libraries, and others for written acceptance. Official acceptances estimated to represent satisfactory support having been received in the absence of active opposition, a letter dated February 4, 1936, was issued to the trade announcing completion of the standard and its effectiveness from March 1, 1936, as a basis for better under-

standing between buyers and sellers of book cloths.

SUPPLEMENT

On recommendation of the Institute of Book Cloth and Impregnated Fabrics Manufacturers, and with the approval of the standing committee, a supplement, TS-2485, to the standard correcting the stripped cloth weight of group E fabrics was issued on May 6, 1938.

FIRST REVISION

A revision of the standard to include minimum requirements for another group of book cloths (C-1) and a change in the number of threads specified for group C book cloths was requested by the Institute of Book Cloth and Impregnated Fabrics Manufacturers on January 24, 1940. These and some supplemental changes, largely minor in character, following approval by the standing committee, were circulated to all interested for acceptance on March 28, 1940.

The recommended revision was subsequently approved by a satisfactory majority of those directly concerned, and the success of

the project was announced on May 22, 1940.

The standard (CS57-40) is effective from June 20, 1940.

ACCEPTANCE OF COMMERCIAL STANDARD

If acceptance has not previously been and returned will provide for the recordithis commercial standard.	filed, this sheet properly filled in, signed, ng of your organization as an acceptor of
	Date
Division of Trade Standards, National Bureau of Standards, Washington, D. C.	
Gentlemen:	
Having considered the statement we accept the Commercial Stand practice in the	ts on the reverse side of this sheet, dard CS57-40 as our standard of
purposes except library bindings). We will assist in securing its ge	pregnated fabrics (for bookbinding
Signature of individual officer	(In ink)
	(In ink)
(Kindly typewrite or 1	owint the following lines:
(ILIMITY TYPOWITED OF)	print the following lines)
Name and title of above officer	
Name and title of above officer	evactly as it should be listed)
Name and title of above officer	exactly as it should be listed)
Name and title of above officer Company	

¹ Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in

connection with the acceptance and its significance:

1. Enforcement.—Commercial standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. The acceptor's responsibility.—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard, and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard, where practicable, in the production, distri-

bution, or consumption of the article in question.

3. The Department's responsibility.—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. Announcement and promulgation.—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withold promulgation and

publication.

ACCEPTORS

The organizations and individuals listed below have accepted this specification as their standard of practice in the production, distribution, and use of book cloths, buckrams, and impregnated fabrics (for bookbinding purposes except library bindings). Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products in this field to conform with the requirements of this standard. Therefore specific evidence of conformity should be obtained where required.

ASSOCIATIONS

American Home Economics Association, Washington, D. C.
American Merchant Marine Library
Association, New York, N. Y. Bible Institute Colportage Association, The, Chicago, Ill. Book Manufacturers' Institute, Inc., New York, N. Y.
Council on Foreign Relations, Inc.,
New York, N. Y.

Educators Association, Inc., New York,

Employing Bookbinders of America, New York, N. Y.

Interlaken Book Cloth Agents Association, New York, N. Y.

International Society of Christian En-deavor, Publishing Department, Boston, Mass. (In principle.)
Portland, Library Association of, Port-

land, Oreg. Review & Herald Pub. Association,

Washington, D. C.

Southern Publishing Association, Nashville, Tenn.

Warren Library Association, Warren, Pa.

FIRMS

Acco Products, Inc., Long Island City, Adriance Memorial Library, Poughkeepsie, N. Y. (In principle.) Advance Sample Book Bindery, Chicago, Ill. Allen Co., Edwin, Chicago, Ill. American Beauty Cover Co., Dallas, American Photographic Publishing Co., Boston, Mass. Antioc Press, The, Yellow Springs, Athol Manufacturing Co., Athol, Mass. Augsburg Publishing House, Minne-apolis, Minn. Bancroft & Sons Co., Joseph, Wilmington, Del Bancroft-Whitney Co., San Francisco, Calif. Banks Upshaw & Co., Dallas, Tex. Banner Book Binding Co., St. Louis, Barrett Bindery Co., The, Chicago, Ill. Bates College Library, Lewiston, Maine. Bath Co., Ltd., M. L., Shreveport, La. Battle Creek Sales Book Co., Inc., Battle Creek, Mich. (In principle.) Bayne Co., The James, Grand Rapids, Mich. Beach Leather Co., Coshocton, Ohio... Beloit College Library, Beloit, Wis. Bible Study Publishing Co., The New York, N. Y. Birchard & Co., C. C., Boston, Mass. Blackwell Wielandy Co., St. Louis, Mo. Bohn & Co., Inc., Chas. H., New York, N. Y. Bookshelf Bindery, The, Ridgetown, Ontario, Canada. Boone Blank Book Co., Boone, Iowa. Boston Public Library, Boston, Mass. Bowdoin College, Brunswick, Maine. Braunworth & Co., Inc., New York, Bredemeier & Co., E. W., Chicago, Ill. Brock & Rankin, Chicago, Ill. Brown-Superior Printing Corporation, New York, N. Y. Bruce Publishing Co., The, Milwaukee, Wis. Burkhardt Co., The, Detroit, Mich. Burlen & Son, Robert, Boston, Mass. Business Bourse, New York, N. Y. Callaghan & Co., Chicago, Ill.

Capital City Bindery, Salem, Oreg. Carolina Ruling & Binding Co., Inc.,

Charlotte, N. C.

Carpenter & Co., L. E., Newark, N. J. Caxton Printers, Ltd., The, Caldwell, Central Bindery Co., Des Moines, Iowa. Central Missouri State Teachers College, Warrensburg, Mo. Central Publishing House, Cleveland, Ohio. Charleston, College of, Library, Charleston, S. C. (In principle.) Chelsea House Publishers (Street & Smith), New York, N. Y.
Chemical Publishing Co., Inc., New
York, N. Y. Chicago Binder & File Co., Chicago, Ill. Clark Co., The Arthur H., Glendale, Calif. College Entrance Book Co., New York, N. Y. Colorado, University of, Boulder, Colo. Colorado Libraries, University of, Boulder, Colo. (In principle.) Columbia Mills, Inc., The, New York, N. Y. Commercial Bindery, Inc., Detroit, Mich. Commercial Bookbinding Co., The, Cleveland, Ohio. Comstock Publishing Co., Inc., Ithaca, N. Y. Concordia Publishing House, St. Louis, Conkey Co., W. B., Hammond, Ind. Continental Bank Supply Co., Mexico, Cooper Union Library, New York, N. Y. (În principle.) Co-operative Music Co., Philadelphia, Cornell University Press, Ithaca, N. Y. Cornwall Press, Inc., The, New York, Davidson College, Davidson, N. C. (In principle.) Davison Publishing Co., Ridgewood, N. J. Dejonge & Co., Louis, New York, N. Y. Denver, University of, Mary Reed Library, Denver, Colo. (In princi-Descret Book Co., Salt Lake City, Utah. Detroit Library, University of, Detroit, Mich. (In principle.) District of Columbia, Government of, Washington, D. C. Dodsworth Stationery Co., Samuel, Kansas City, Mo. Dorrance & Co., Inc., Philadelphia, Pa. Drake & Co., Frederick J., Chicago, Ill. du Pont de Nemours & Co., E. I., New York, N. Y. Dunleavy Co., The, Boston, Mass. Dura Binding Co., Marlboro, Mass. Dutton & Co., Inc., E. P., New York,

Educator Supply Co., Mitchell, S. Dak.

Eggeling Bookbindery, New York, N. Y (In principle.) Elbe File & Binder Co., Inc., Fall River, Mass.(In principle.) Engdahl Bindery, Inc., Chicago, Ill. Fain Textile Co., Pawtucket, R. I. Falcon Press, The, New York, N. Y. Ferris Printing Co., The, New York, N. Y Field Museum of Natural History, Chicago, Ill. Financial Publishing Co., Boston, Mass. Fleming & Co., Inc., C. B., Norwood, Mass Florida State Library, Tallahassee, Fla. Follett Publishing Co., Chicago, Ill. Forest City Bookbinding Co., Cleveland, Ohio (In principle.) Froman Co., O. J., Monmouth, Ill. Franklin Bindery, Philadelphia, Pa. Free Hand Binder Co., New York, N. Y. Gane Bros. & Co. of New York, Inc., New York, N. Y. Gane Brothers & Lane, Inc., Chicago, Garber Co., The A. L., Ashland, Ohio. Giljohann-Just Co., Milwaukee, Wis. Gilmer, John Elgin (The Gilmer Binder), Philadelphia, Pa.
Ginn & Co.—The Athenaeum Press, Cambridge, Mass.
Globe Book Co., New York, N. Y.
Gotham-Ebert Co., New York, N. Y.
Grady Press, Inc., George, New York, Grand Rapids Loose Leaf Binder Co., The, Grand Rapids, Mich. Griffin, Campbell, Hayes, Walsh, Inc., New York, N. Y. Grosset & Dunlap, Inc., New York, N. Y. Gruver Co., The Edward F., Washington, D. C. Haddon Book Bindery, Inc., The, Camden, N. J. Hall Awning Co., Inc., Dallas, Tex.
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Inland Press of Asheville, Inc., The, Montana State College Library, Boze-Asheville, N. C. Interlaken Mills, Fiskeville, R. I. International Textbook Press, Scranton, Pa. Joanna Textile Mills Co., (The Western Shade Cloth Co.), Chicago, Ill. Johnson Publishing Co., Richmond, Va. Judy Publishing Co., Chicago, Ill. Keratol Co., The, Newark, N. J. Kingsport Press, Inc., Kingsport, Tenn. Knauber Lithographing Co., J., Milwaukee, Wis. Knolls' Bookbindery, New York, N. Y. Kolarik Bookbinding Co., Cedar Rapids, La Salle Extension University, Chicago, Ill. Law Co., Robert O., Chicago, Ill. Leland, Inc., Samuel R., New York, Limited Editions Club, The, New York, N. Y. (In principle.) Little, Inc., Arthur D., Cambridge, Mass. Long Beach, Better Business Bureau of, Long Beach, Calif. Longmans, Green & Co., Inc., New York, N. Y. Louisiana State University Library, University, La. Louisville, University of, Louisville, Ky. MacFadden Book Co., Inc., New York, Mack Printing Co., Easton, Pa. Manual Arts Press, The, Peoria, Ill. (In principle.) Maple Press Co., Inc., The, York, Pa. (In principle.) Marshall Son & Wheelock, Inc., Boston, Mass. McBride & Co., Robert M., New York, N. Y. McGraw-Hill Book Co., Inc., New York, N. Y. Mennonite Publishing House, Scottdale, Mentzer, Bush & Co., Chicago, Ill. Merrill Co., Charles E., New York, N. Y. Mexico Bank-Supply Co., Mexico, Mo. Michigan College of Mining & Tech-nology, Houghton, Mich. (In principle.) Miller Blank Book Co., Fred R., Williamsport, Pa. Miller Co., H. C., Milwaukee, Wis. Minnesota Library, University of, Minneapolis, Minn. Minot, Hooper & Co., New York, N. Y. (In principle.) Mitchell & Hotchkiss, Richmond, Va. Mitchell Binder Co., Hagerstown, Md. Mitchell Printing Co., Wm., Greenfield, Ind.

Mitchell Publishing Co., The, Mitchell,

S. Dak. (In principle.)

man, Mont. Morton & Co., John P., Louisville, Ky. Mosby Co., The C. V., St. Louis, Mo. National Blank Book Co., Holyoke, Mass. National Library Bindery Co., West Springfield, Mass. National Publishing Co., Philadelphia, Pa. Nelson Publishing Co., C. C., Appleton, Wis. New Mexico State College of Agriculture & Mechanic Arts, State College. N. Mex. New Orleans, Inc., Better Business Bureau of, New Orleans, La. (In principle.) New York Public Library, The, New York, N. Y. New York University, New York, N. Y. Nickerson & Collins Co., Chicago, Ill. Noble & Noble, Publishers, Inc., New York, N. Y.
Norin Co., A. N., Philadelphia, Pa.
North Carolina Press, The University
of, Chapel Hill, N. C. North Dakota, State Teachers College Library of, Minot, N. Dak. (In prin-Northeastern State College, Tahlequah, Okla. Northwestern Bindery, The, Evanston. Nuss, Henry,—Bookbinder, Dallas, Tex. Oklahoma State Library, Oklahoma City, Okla. Oldach Co., Philadelphia, Pa. Pacific University Library, Forest Grove Oreg. (In principle.) Paragon Binder Cor Binder Corporation, New York, N. Y. Paramount Press, Inc., Scranton, Pa. (In principle.) Philadelphia Museum of Art, Philadelphia, Pa. (In principle.)
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Texas Press, University of, Austin, Tex. (In principle.) Theosophical Press, The, Wheaton, Ill. Times-Journal Pub. Co., Oklahoma City, Okla. (In principle.) Torch Press, The, Cedar Rapids, Iowa. Tower Press, Inc., Chicago, Ill. (In principle.) Translation Publishing Co., Inc., The, New York, N. Y. Triangle Bookbinding Co., Detroit, Mich. Trinity College, Hartford, Conn. Tulane University Library, New Orleans, La. Tuttle Publishing Co., Inc., The, Rutland, Vt. Union of American Hebrew Congregations, The, Cincinnati, Ohio. United Bindery, Inc., New York, N. Y. United Publishing Co., New York, United States Testing Co., Inc., Hoboken, N. J. (In principle.) Vail, C. E., Fort Collins, Colo. Van Buren Brothers, Chicago, Ill. Van Nostrand Co., Inc., D., York, N. Y Wagenfuehr Bookbinding Co., F. A., St. Louis, Mo. Washington City Administrative Unit, Washington, N. C. Washington Press, University of, Seattle, Wash. (In principle.) Washington Printing & Binding Co., Seattle, Wash. Watertown Bindery Co., Watertown, Mass. Waverly Press, Inc., Baltimore, Md. Webb Publishing Co., St. Paul, Minn. Wesby & Sons, J. S., Worcester, Mass. Whitehouse Leather Products Co., Inc., Brooklyn, N. Y. White, Son Co., Boston, Mass. Whitman & Co., Albert, Chicago, Ill. Wilson Jones Co., Chicago, Ill. and Elizabeth, N. J. Winston Co., The John C., Philadelphia, Pa. Worzalla Publishing Co., Stevens Point, World Book Co., Yonkers, N. Y. Worth Bindery, Ft. Worth, Tex. Ye Olde Record Binding Co., New York, N. Y. U. S. GOVERNMENT

Tennessee, The University of, Knoxville, Tenn. (In principle.)

Government Printing Office, Washington, D. C.
Veterans' Administration, Washington, D. C.
War Department, Washington, D. C.

COMMERCIAL STANDARDS

CS No. Item	CS No. Item
0-40. Commercial standards and their value to business (third edition).	49-34. Chip board, laminated chip board, and mis-
1-32. Clinical thermometers (second edition). 2-30. Mopsticks.	cellaneous boards for bookbinding purposes. 50-34. Binders board for bookbinding and other
3-40. Stoddard solvent (third edition). 4-29. Staple porcelain (all-clay) plumbing fixtures.	purposes, 51-35. Marking articles made of silver in combina-
5-40. Pipe nipples; brass, copper, steel and wrought from	tion with gold. 52-35. Mohair pile fabrics (100-percent mohair plain
6-31. Wrought-iron pipe nipples (second edition).	velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
Superseded by CS5-40. 7-29. Standard weight malleable iron or steel screwed unions.	53–35. Colors and finishes for cast stone. 54–35. Mattresses for hospitals.
8-33. Gage blanks (second edition).	55-35. Mattresses for institutions. 56-36. Oak flooring.
9-33. Builders' template hardware (second edition). 10-29. Brass pipe nipples. Superseded by CS5-40.	57-40. Book cloths, buckrams, and impregnated
11-29. Regain of mercerized cotton yarns.	fabrics for bookbinding purposes except
12-40. Fuel oils (fifth edition).	library bindings (second edition). 58–36. Woven elastic fabrics for use in overalls (over-
13-39. Dress patterns (second edition). 14-39. Boys' button-on waists, shirts, junior and polo	all elastic webbing).
shirts (made from woven fabrics) (second	59-39. Woven dress fabrics—testing and reporting (second edition).
edition). 15-29. Men's pajamas.	60-36. Hardwood dimension lumber.
16-29. Wall paper.	61-37. Wood slat venetian blinds.
17-32. Diamond core drill fittings (second edition).	62–38. Colors for kitchen accessories. 63–38. Colors for bathroom accessories.
18-29. Hickory golf shafts.	64-37. Walnut veneers.
19-32. Foundry patterns of wood (second edition). 20-36. Staple vitreous china plumbing fixtures	65-38. Wool and part-wool fabrics.
(second edition).	66-38. Marking of articles made wholly or in part of
21-39. Interchangeable ground-glass joints, stop- cocks, and stoppers (fourth edition).	platinum. 67–38. Marking articles made of karat gold.
22-40. Builders' hardware (nontemplate) (second edition).	68-38. Liquid hypochlorite disinfectant, deodorant, and germicide.
23-30. Feldspar.	69-38. Pine oil disinfectant.
24-30. Standard screw threads.	70–38. Coal tar disinfectant (emulsifying type). 71–38. Cresylic disinfectants.
25-30. Special screw threads. 26-30. Aromatic red cedar closet lining.	72-38. Household insecticide (lqiuid spray type).
27-36. Mirrors (second edition).	73-38. Old growth Douglas fir standard stock doors.
28-32. Cotton fabric tents, tarpaulins, and covers.	74–39. Solid hardwood wall paneling. 75–39. Automatic mechanical draft oil burners.
29-31. Staple seats for water-closet bowls.	76–39. Hardwood interior trim and molding.
30-31. Colors for sanitary ware. 31-38. Wood shingles (fourth edition).	77-40. Sanitary cast-iron enameled ware.
32-31. Cotton cloth for rubber and pyroxlin coating.	78-39. Ground-and-polished lenses for sun glasses.
33-32. Knit underwear (exclusive of rayon).	79-39. Blown, drawn, and dropped lenses for sun glasses.
34-31. Bag, case, and strap leather. 35-31. Plywood (hardwood and eastern red cedar).	80-41. Electric direction signal systems other than
36-33. Fourdrinier wire cloth (second edition).	semaphore type for commercial and other
37-31. Steel bone plates and screws.	vehicles subject to special motor vehicle laws (after market).
38-32. Hospital rubber sheeting.	81-41. Adverse-weather lamps for vehicles (after
39-37. Wool and part wool blankets (second edition).	market).
40-32. Surgeons' rubber gloves. 41-32. Surgeons' latex gloves.	82-41. Inner-controlled spotlamps for vehicles (after
42-35. Fiber insulating board (second edition).	market). 83-41. Clearance, marker, and identification lamps
43-32. Grading of sulphonated oils. 44-32. Apple wraps.	for vehicles (after market).
45-40. Douglas fire plywood (domestic grades) (fourth edition).	84-41. Electric tail lamps for vehicles (after market). 85-41. Electric license-plate lamps for vehicles (after
46-40. Hosiery lengths and sizes (third edition).	market).
47-34. Marking of gold-filled and rolled-gold-plate	86-41. Electric stop lamps for vehicles (after market). 87-41. Red electric warning lanterns.
articles other than watch cases. 48-34. Domestic burners for Pennsylvania anthra-	88-41. Liquid-burning flares.
cite (underfeed type).	89-40. Hardwood Stair Treads and Risers.

Notice.—Those interested in Commercial standards with a view toward accepting them as a basis of every-day practice may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.